Plus Search

10671909_CLSTITLES1.txt
Titles of Most Frequently Occurring Classifications of Patents Returned
From A Search of 10671909 on August 03, 2005

```
24  250/231.13    (17 OR, 7 XR)
          Class   250 :  RADIANT ENERGY
          250/200       PHOTOCELLS; CIRCUITS AND APPARATUS
          250/216       .Optical or pre-photocell system
          250/229       ..Light valve (e.g., iris diaphragm)
          250/231.1     ...Actuated by dynamic external physical
                            quantity
          250/231.13    ....Shaft angle transducers

21  250/237G      (1 OR, 20 XR)
          Class   250 :  RADIANT ENERGY
          250/200       PHOTOCELLS; CIRCUITS AND APPARATUS
          250/216       .Optical or pre-photocell system
          250/237R      ..Hoods, grating, baffles, diaphragms, masks
          250/237G      ...Gratings (moire fringes)

18  341/13        (3 OR, 15 XR)
          Class   341 :  CODED DATA GENERATION OR CONVERSION
          341/1         DIGITAL PATTERN READING TYPE CONVERTER
          341/13        .Optical

17  250/231.16    (10 OR, 7 XR)
          Class   250 :  RADIANT ENERGY
          250/200       PHOTOCELLS; CIRCUITS AND APPARATUS
          250/216       .Optical or pre-photocell system
          250/229       ..Light valve (e.g., iris diaphragm)
          250/231.1     ...Actuated by dynamic external physical
                            quantity
          250/231.13    ....Shaft angle transducers
          250/231.14    .....Incremental shaft readers; i.e., with
                            means to generate increments of angular shaft rotation
          250/231.16    ......Using phase difference of output signals
                            from plural photodetectors

15  250/231.14    (8 OR, 7 XR)
          Class   250 :  RADIANT ENERGY
          250/200       PHOTOCELLS; CIRCUITS AND APPARATUS
          250/216       .Optical or pre-photocell system
          250/229       ..Light valve (e.g., iris diaphragm)
          250/231.1     ...Actuated by dynamic external physical
                            quantity
          250/231.13    ....Shaft angle transducers
          250/231.14    .....Incremental shaft readers; i.e., with
                            means to generate increments of angular shaft rotation

14  250/231.18    (4 OR, 10 XR)
          Class   250 :  RADIANT ENERGY
          250/200       PHOTOCELLS; CIRCUITS AND APPARATUS
          250/216       .Optical or pre-photocell system
          250/229       ..Light valve (e.g., iris diaphragm)
          250/231.1     ...Actuated by dynamic external physical
                            quantity
          250/231.13    ....Shaft angle transducers
          250/231.14    .....Incremental shaft readers; i.e., with
                            means to generate increments of angular shaft rotation
          250/231.18    ......Position indicating shaft encoders with
                            means to generate a unique signal for each specific
angular
                            shaft position
```

11 369/44.27 (6 OR, 5 XR)
Class 369 : DYNAMIC INFORMATION STORAGE OR RETRIEVAL
369/43 WITH SERVO POSITIONING OF TRANSDUCER ASSEMBLY OVER TRACK COMBINED WITH INFORMATION SIGNAL PROCESSING
369/44.11 .Optical servo system
369/44.27 ..Initialization/start-up or changing modes of system

10 341/15 (5 OR, 5 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/1 DIGITAL PATTERN READING TYPE CONVERTER
341/15 .Magnetic, inductive or capacitive

9 324/207.25 (2 OR, 7 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/200 MAGNETIC
324/207.11 .Displacement
324/207.25 ..Rotary

9 369/53.37 (2 OR, 7 XR)
Class 369 : DYNAMIC INFORMATION STORAGE OR RETRIEVAL
369/53.1 CONDITION INDICATING, MONITORING, OR TESTING
369/53.11 .Including radiation storage or retrieval
369/53.37 ..Initialization or start-up mode or changing system mode.

7 341/11 (4 OR, 3 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/1 DIGITAL PATTERN READING TYPE CONVERTER
341/11 .Incremental

6 318/602 (2 OR, 4 XR)
Class 318 : ELECTRICITY: MOTIVE POWER SYSTEMS
318/560 POSITIONAL SERVO SYSTEMS (E.G., SERVOMECHANISMS)
318/600 .Digital or numerical systems
318/601 ..Digital comparison
318/602 ...Commutating switch-type encoder

6 324/207.21 (1 OR, 5 XR)
Class 324 : ELECTRICITY: MEASURING AND TESTING
324/200 MAGNETIC
324/207.11 .Displacement
324/207.13 ..Having particular sensor means
324/207.21 ...Magnetoresistive

6 341/6 (2 OR, 4 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/1 DIGITAL PATTERN READING TYPE CONVERTER
341/6 .With directional discrimination

5 318/632 (2 OR, 3 XR)
Class 318 : ELECTRICITY: MOTIVE POWER SYSTEMS
318/560 POSITIONAL SERVO SYSTEMS (E.G., SERVOMECHANISMS)
318/632 .With compensating features

5 341/9 (0 OR, 5 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/1 DIGITAL PATTERN READING TYPE CONVERTER
341/9 .Having combined (e.g., denominational, combination code) coding pattern

```
4  101/248       (3 OR, 1 XR)
       Class   101 :  PRINTING
       101/212       ROLLING CONTACT MACHINES
       101/216       .Rotary
       101/248       ..Cylinder-registering mechanisms

4  200/11G       (0 OR, 4 XR)
       Class   200 :  ELECTRICITY:  CIRCUIT MAKERS AND BREAKERS
       200/1R        MULTIPLE CIRCUIT CONTROL
       200/6R        .Pivoted contact
       200/11R       ..Dial type
       200/11G       ...Leaf spring bias

4  200/11R       (3 OR, 1 XR)
       Class   200 :  ELECTRICITY:  CIRCUIT MAKERS AND BREAKERS
       200/1R        MULTIPLE CIRCUIT CONTROL
       200/6R        .Pivoted contact
       200/11R       ..Dial type

4  250/229       (1 OR, 3 XR)
       Class   250 :  RADIANT ENERGY
       250/200       PHOTOCELLS; CIRCUITS AND APPARATUS
       250/216       .Optical or pre-photocell system
       250/229       ..Light valve (e.g., iris diaphragm)

4  250/231.17    (0 OR, 4 XR)
       Class   250 :  RADIANT ENERGY
       250/200       PHOTOCELLS; CIRCUITS AND APPARATUS
       250/216       .Optical or pre-photocell system
       250/229       ..Light valve (e.g., iris diaphragm)
       250/231.1     ...Actuated by dynamic external physical
                           quantity
       250/231.13    ....Shaft angle transducers
       250/231.14    .....Incremental shaft readers; i.e., with
                          means to generate increments of angular shaft rotation
       250/231.17    ......With means to indicate a complete shaft
                          rotation

4  318/603       (1 OR, 3 XR)
       Class   318 :  ELECTRICITY:  MOTIVE POWER SYSTEMS
       318/560       POSITIONAL SERVO SYSTEMS (E.G.,
                          SERVOMECHANISMS)
       318/600       .Digital or numerical systems
       318/603       ..Pulse-counting systems

4  318/640       (0 OR, 4 XR)
       Class   318 :  ELECTRICITY:  MOTIVE POWER SYSTEMS
       318/560       POSITIONAL SERVO SYSTEMS (E.G.,
                          SERVOMECHANISMS)
       318/638       .With particular "error-detecting" means
       318/640       ..Photoelectric or optical-type measuring
                          instruments

4  324/174       (1 OR, 3 XR)
       Class   324 :  ELECTRICITY:  MEASURING AND TESTING
       324/160       ELECTRICAL SPEED MEASURING
       324/166       .Including speed-related frequency generator
       324/173       ..Including magnetic detector
       324/174       ...Permanent magnet type

4  340/870.37    (3 OR, 1 XR)
       Class   340 :  COMMUNICATIONS:  ELECTRICAL
```

```
        340/870.01    CONTINUOUSLY VARIABLE INDICATING (E.G.,
                        TELEMETERING)
        340/870.3     .With particular transmitter (e.g.,
                        piezoelectric, dynamo)
        340/870.37    ..Capacitive transmitter

4  341/2          (0 OR, 4 XR)
        Class   341 :  CODED DATA GENERATION OR CONVERSION
        341/1         DIGITAL PATTERN READING TYPE CONVERTER
        341/2         .Plural denominationally related carriers
                        (e.g., coarse/fine geared discs)

4  369/53.29      (2 OR, 2 XR)
        Class   369 :  DYNAMIC INFORMATION STORAGE OR RETRIEVAL
        369/53.1      CONDITION INDICATING, MONITORING, OR TESTING
        369/53.11     .Including radiation storage or retrieval
        369/53.25     ..Of transducer assembly mechanism
        369/53.29     ...Transduced location indicating

4  369/53.3       (1 OR, 3 XR)
        Class   369 :  DYNAMIC INFORMATION STORAGE OR RETRIEVAL
        369/53.1      CONDITION INDICATING, MONITORING, OR TESTING
        369/53.11     .Including radiation storage or retrieval
        369/53.3      ..Of relative motion producing mechanism

4  377/17         (1 OR, 3 XR)
        Class   377 :  ELECTRICAL PULSE COUNTERS, PULSE DIVIDERS, OR
                        SHIFT REGISTERS:  CIRCUITS AND SYSTEMS
        377/1         APPLICATIONS
        377/17        .Position determining

4  377/45         (1 OR, 3 XR)
        Class   377 :  ELECTRICAL PULSE COUNTERS, PULSE DIVIDERS, OR
                        SHIFT REGISTERS:  CIRCUITS AND SYSTEMS
        377/27        SYSTEMS
        377/45        .Including reversible counter

4  600/459        (4 OR, 0 XR)
        Class   600 :  SURGERY
        600/300       DIAGNOSTIC TESTING
        600/407       .Detecting nuclear, electromagnetic, or
                        ultrasonic radiation
        600/437       ..Ultrasonic
        600/459       ...Structure of transducer or probe assembly

4  720/660        (1 OR, 3 XR)
        720/658       DYNAMIC MECHANISM OPTICAL SUBSYSTEM
        720/659       .Having power driven optical transducer
                        assembly
        720/660       ..Sensor detecting position of optical
                        transducer
        Could not find class title.

3   33/203.12     (1 OR, 2 XR)
        Class   033 :  GEOMETRICAL INSTRUMENTS
        33/501        GAUGE
        33/203        .Wheel
        33/203.12     ..With wheel supporting means

3   73/633        (0 OR, 3 XR)
        Class   073 :  MEASURING AND TESTING
        73/570        VIBRATION
        73/584        .By mechanical waves
```

```
        73/596          ..Beamed
        73/632          ...Sonic wave transmitter or receiver
                           transducer
        73/633          ....Having transducer scanning means

3  200/18        (0 OR, 3 XR)
        Class   200 :  ELECTRICITY:  CIRCUIT MAKERS AND BREAKERS
        200/1R          MULTIPLE CIRCUIT CONTROL
        200/17R         .Operating means
        200/18          ..Plural switch

3  250/231.15    (0 OR, 3 XR)
        Class   250 :  RADIANT ENERGY
        250/200         PHOTOCELLS; CIRCUITS AND APPARATUS
        250/216         .Optical or pre-photocell system
        250/229         ..Light valve (e.g., iris diaphragm)
        250/231.1       ...Actuated by dynamic external physical
                           quantity
        250/231.13      ....Shaft angle transducers
        250/231.14      .....Incremental shaft readers; i.e., with
                           means to generate increments of angular shaft rotation
        250/231.15      ......With plural gear driven discs

3  250/551       (0 OR, 3 XR)
        Class   250 :  RADIANT ENERGY
        250/200         PHOTOCELLS; CIRCUITS AND APPARATUS
        250/551         .Signal isolator

3  310/68B       (2 OR, 1 XR)
        Class   310 :  ELECTRICAL GENERATOR OR MOTOR STRUCTURE
        310/10          DYNAMOELECTRIC
        310/40R         .Rotary
        310/66          ..With other elements
        310/68R         ...Electric circuit elements
        310/68B         ....Condition responsive (e.g., position,
                           torque, etc.)

3  318/630       (0 OR, 3 XR)
        Class   318 :  ELECTRICITY:  MOTIVE POWER SYSTEMS
        318/560         POSITIONAL SERVO SYSTEMS (E.G.,
                           SERVOMECHANISMS)
        318/630         .Antibacklash systems (e.g., with
                           unidirectional approach to balance)

3  318/85        (0 OR, 3 XR)
        Class   318 :  ELECTRICITY:  MOTIVE POWER SYSTEMS
        318/34          PLURAL, DIVERSE OR DIVERSELY CONTROLLED
                           ELECTRIC MOTORS
        318/85          .Synchronizing or phasing control

3  324/175       (1 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/160         ELECTRICAL SPEED MEASURING
        324/166         .Including speed-related frequency generator
        324/175         ..Including radiant energy detector

3  324/207.2     (2 OR, 1 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/200         MAGNETIC
        324/207.11      .Displacement
        324/207.13      ..Having particular sensor means
        324/207.2       ...Hall effect
```

```
3  327/4          (1 OR, 2 XR)
       Class    327 :  MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR
                         DEVICES, CIRCUITS, AND SYSTEMS
       327/1           SPECIFIC SIGNAL DISCRIMINATING (E.G.,
                             COMPARING, SELECTING, ETC.) WITHOUT SUBSEQUENT CONTROL

       327/2           .By phase
       327/3           ..Comparison between plural inputs (e.g., phase
                           angle indication, lead-lag discriminator, etc.)
       327/4           ...With transducer

3  341/10         (0 OR, 3 XR)
       Class    341 :  CODED DATA GENERATION OR CONVERSION
       341/1           DIGITAL PATTERN READING TYPE CONVERTER
       341/9           .Having combined (e.g., denominational,
                           combination code) coding pattern
       341/10          ..Constant distance code

3  345/156        (2 OR, 1 XR)
       Class    345 :  COMPUTER GRAPHICS PROCESSING, OPERATOR
                         INTERFACE PROCESSING, AND SELECTIVE VISUAL   DISPLAY
                         SYSTEMS
       345/156         DISPLAY PERIPHERAL INTERFACE INPUT DEVICE

3  345/184        (1 OR, 2 XR)
       Class    345 :  COMPUTER GRAPHICS PROCESSING, OPERATOR
                         INTERFACE PROCESSING, AND SELECTIVE VISUAL   DISPLAY
                         SYSTEMS
       345/156         DISPLAY PERIPHERAL INTERFACE INPUT DEVICE
       345/184         .Mechanical control (e.g., rotatable knob,
                          slider)

3  360/75         (3 OR, 0 XR)
       Class    360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                         RETRIEVAL
       360/69          AUTOMATIC CONTROL OF A RECORDER MECHANISM
       360/75          .Controlling the head

3  377/24         (2 OR, 1 XR)
       Class    377 :  ELECTRICAL PULSE COUNTERS, PULSE DIVIDERS, OR
                         SHIFT REGISTERS:  CIRCUITS AND SYSTEMS
       377/1           APPLICATIONS
       377/19          .Measuring or testing
       377/24          ..Dimension

3  600/446        (3 OR, 0 XR)
       Class    600 :  SURGERY
       600/300         DIAGNOSTIC TESTING
       600/407         .Detecting nuclear, electromagnetic, or
                              ultrasonic radiation
       600/437         ..Ultrasonic
       600/443         ...Anatomic image produced by reflective
                           scanning
       600/445         ....Mechanical scanning
       600/446         .....Hand-held unit

3  901/23         (0 OR, 3 XR)
       Class    901 :  ROBOTS
       901/19          DRIVE SYSTEM FOR ARM
       901/23          .Electric motor

2   29/40         (1 OR, 1 XR)
       Class    029 :  METAL WORKING
```

```
        29/33R          PLURAL DIVERSE MANUFACTURING APPARATUS
                            INCLUDING MEANS FOR METAL SHAPING OR ASSEMBLING
        29/35.5         .With turret mechanism
        29/39           ..Tool turret
        29/40           ...Rotary tool holder

2   33/1PT        (1 OR, 1 XR)
        Class    033 :  GEOMETRICAL INSTRUMENTS
        33/1R           MISCELLANEOUS
        33/1PT          .Angular position transducer

2   33/203.14     (1 OR, 1 XR)
        Class    033 :  GEOMETRICAL INSTRUMENTS
        33/501          GAUGE
        33/203          .Wheel
        33/203.12       ..With wheel supporting means
        33/203.14       ...Pivoted or sliding scuff board

2   33/707        (0 OR, 2 XR)
        Class    033 :  GEOMETRICAL INSTRUMENTS
        33/700          DISTANCE MEASURING
        33/706          .Scale reading position sensor (e.g., grid
                            counting)
        33/707          ..Optical

2   74/471XY      (1 OR, 1 XR)
        Class    074 :  MACHINE ELEMENT OR MECHANISM
        74/469          CONTROL LEVER AND LINKAGE SYSTEMS
        74/471R         .Multiple controlled elements
        74/471XY        ..Control moves in two planes

2   74/813L       (1 OR, 1 XR)
        Class    074 :  MACHINE ELEMENT OR MECHANISM
        74/813R         ROTARY MEMBER OR SHAFT INDEXING, E.G., TOOL OR
                            WORK TURRET
        74/813L         .Locking means

2   82/12         (2 OR, 0 XR)
        Class    082 :  TURNING
        82/11           AXIAL PATTERN
        82/12           .Pivoted tool rest

2   82/18         (0 OR, 2 XR)
        Class    082 :  TURNING
        82/18           PATTERN SECTION

2   82/19         (0 OR, 2 XR)
        Class    082 :  TURNING
        82/18           PATTERN SECTION
        82/19           .Cam-controlled cutter

2   91/361        (1 OR, 1 XR)
        Class    091 :  MOTORS: EXPANSIBLE CHAMBER TYPE
        91/358R         WORKING MEMBER POSITION FEEDBACK TO MOTIVE
                            FLUID CONTROL
        91/361          .Electrical input and feedback signal means
                           (459)

2   91/459        (0 OR, 2 XR)
        Class    091 :  MOTORS: EXPANSIBLE CHAMBER TYPE
        91/418          WITH MOTIVE FLUID VALVE
        91/459          .Electrically operated (275) (361)
```

2 101/219 (0 OR, 2 XR)
Class 101 : PRINTING
101/212 ROLLING CONTACT MACHINES
101/216 .Rotary
101/219 ..Web

2 112/220 (0 OR, 2 XR)
Class 112 : SEWING
112/270 ELEMENTS
112/220 .Driving mechanisms

2 125/13.01 (1 OR, 1 XR)
Class 125 : STONE WORKING
125/12 SAWING
125/13.01 .Rotary

2 200/4 (1 OR, 1 XR)
Class 200 : ELECTRICITY: CIRCUIT MAKERS AND BREAKERS
200/1R MULTIPLE CIRCUIT CONTROL
200/4 .Combined pivoted and reciprocating contact

2 200/564 (1 OR, 1 XR)
Class 200 : ELECTRICITY: CIRCUIT MAKERS AND BREAKERS
200/502 SOLID CONTACT
200/564 .Rotating actuator (e.g., dial)

2 235/375 (1 OR, 1 XR)
Class 235 : REGISTERS
235/375 SYSTEMS CONTROLLED BY DATA BEARING RECORDS

2 250/231.1 (1 OR, 1 XR)
Class 250 : RADIANT ENERGY
250/200 PHOTOCELLS; CIRCUITS AND APPARATUS
250/216 .Optical or pre-photocell system
250/229 ..Light valve (e.g., iris diaphragm)
250/231.1 ...Actuated by dynamic external physical quantity

2 250/559.29 (1 OR, 1 XR)
Class 250 : RADIANT ENERGY
250/200 PHOTOCELLS; CIRCUITS AND APPARATUS
250/559.01 .With circuit for evaluating a web, strand, strip, or sheet
250/559.29 ..Measuring position

2 271/270 (1 OR, 1 XR)
Class 271 : SHEET FEEDING OR DELIVERING
271/8.1 FEEDING
271/264 .By means to convey sheet (e.g., from pack to operation)
271/270 ..With means to vary speed of conveyor sheet

2 310/268 (0 OR, 2 XR)
Class 310 : ELECTRICAL GENERATOR OR MOTOR STRUCTURE
310/10 DYNAMOELECTRIC
310/40R .Rotary
310/261 ..Rotor structure
310/264 ...Armatures
310/268 ....Disc

2 310/323.03 (0 OR, 2 XR)
Class 310 : ELECTRICAL GENERATOR OR MOTOR STRUCTURE
310/300 NON-DYNAMOELECTRIC

310/311 .Piezoelectric elements and devices
310/321 ..Combined with resonant structure
310/323.01 ...Direct mechanical coupling
310/323.02 ....Motor producing continual motion
310/323.03 .....Traveling wave motor

2 310/348 (2 OR, 0 XR)
Class 310 : ELECTRICAL GENERATOR OR MOTOR STRUCTURE
310/300 NON-DYNAMOELECTRIC
310/311 .Piezoelectric elements and devices
310/348 ..With mounting or support means

2 318/283 (0 OR, 2 XR)
Class 318 : ELECTRICITY: MOTIVE POWER SYSTEMS
318/280 MOTOR-REVERSING
318/283 .Automatic and/or with time-delay means

2 318/561 (2 OR, 0 XR)
Class 318 : ELECTRICITY: MOTIVE POWER SYSTEMS
318/560 POSITIONAL SERVO SYSTEMS (E.G., SERVOMECHANISMS)
318/561 .Adaptive or optimizing systems including "bang-bang" servos

2 318/568.22 (1 OR, 1 XR)
Class 318 : ELECTRICITY: MOTIVE POWER SYSTEMS
318/560 POSITIONAL SERVO SYSTEMS (E.G., SERVOMECHANISMS)
318/567 .Program- or pattern-controlled systems
318/568.1 ..With program recording or composing means
318/568.11 ...Multifunction manipulator (i.e., Robot)
318/568.22 ....With particular compensation (e.g., gain, offset, etc.)

2 318/615 (0 OR, 2 XR)
Class 318 : ELECTRICITY: MOTIVE POWER SYSTEMS
318/560 POSITIONAL SERVO SYSTEMS (E.G., SERVOMECHANISMS)
318/611 .With stabilizing features (e.g., anti-hunting, damping)
318/615 ..By auxiliary feedback loop

2 318/616 (0 OR, 2 XR)
Class 318 : ELECTRICITY: MOTIVE POWER SYSTEMS
318/560 POSITIONAL SERVO SYSTEMS (E.G., SERVOMECHANISMS)
318/611 .With stabilizing features (e.g., anti-hunting, damping)
318/615 ..By auxiliary feedback loop
318/616 ...Rate feedback

2 318/618 (0 OR, 2 XR)
Class 318 : ELECTRICITY: MOTIVE POWER SYSTEMS
318/560 POSITIONAL SERVO SYSTEMS (E.G., SERVOMECHANISMS)
318/611 .With stabilizing features (e.g., anti-hunting, damping)
318/615 ..By auxiliary feedback loop
318/616 ...Rate feedback
318/618 ....Tachometer feedback

2 318/653 (1 OR, 1 XR)
Class 318 : ELECTRICITY: MOTIVE POWER SYSTEMS

```
        318/560       POSITIONAL SERVO SYSTEMS (E.G.,
                        SERVOMECHANISMS)
        318/638       .With particular "error-detecting" means
        318/652       ..With particular position measuring
                        instruments
        318/653       ...Magnetic transducers

2  318/654       (1 OR, 1 XR)
        Class   318 :  ELECTRICITY:  MOTIVE POWER SYSTEMS
        318/560       POSITIONAL SERVO SYSTEMS (E.G.,
                        SERVOMECHANISMS)
        318/638       .With particular "error-detecting" means
        318/652       ..With particular position measuring
                        instruments
        318/654       ...Synchro control transmitter-transformer
                        systems

2  318/660       (1 OR, 1 XR)
        Class   318 :  ELECTRICITY:  MOTIVE POWER SYSTEMS
        318/560       POSITIONAL SERVO SYSTEMS (E.G.,
                        SERVOMECHANISMS)
        318/638       .With particular "error-detecting" means
        318/652       ..With particular position measuring
                        instruments
        318/656       ...Differential transformer systems
        318/660       ...."Inductosyn" systems

2  318/661       (1 OR, 1 XR)
        Class   318 :  ELECTRICITY:  MOTIVE POWER SYSTEMS
        318/560       POSITIONAL SERVO SYSTEMS (E.G.,
                        SERVOMECHANISMS)
        318/638       .With particular "error-detecting" means
        318/652       ..With particular position measuring
                        instruments
        318/656       ...Differential transformer systems
        318/661       ....Resolver systems

2  318/685       (2 OR, 0 XR)
        Class   318 :  ELECTRICITY:  MOTIVE POWER SYSTEMS
        318/560       POSITIONAL SERVO SYSTEMS (E.G.,
                        SERVOMECHANISMS)
        318/671       .With particular motor control system
                        responsive to the "actuating signal"
        318/685       .."Step-by-step" motors in closed-loop servos


2  324/160       (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/160       ELECTRICAL SPEED MEASURING

2  324/162       (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/160       ELECTRICAL SPEED MEASURING
        324/162       .With acceleration measuring means

2  324/165       (1 OR, 1 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/160       ELECTRICAL SPEED MEASURING
        324/163       .Including speed analog electrical signal
                        generator
        324/165       ..With direction indicator

2  324/173       (1 OR, 1 XR)
```

```
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/160       ELECTRICAL SPEED MEASURING
        324/166       .Including speed-related frequency generator
        324/173       ..Including magnetic detector

2  324/207.13    (1 OR, 1 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/200       MAGNETIC
        324/207.11    .Displacement
        324/207.13    ..Having particular sensor means

2  324/207.18    (2 OR, 0 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/200       MAGNETIC
        324/207.11    .Displacement
        324/207.13    ..Having particular sensor means
        324/207.15    ...Inductive
        324/207.16    ....Electrically energized
        324/207.18    .....Differential type (e.g., LVDT)

2  324/252       (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/200       MAGNETIC
        324/244       .Magnetometers
        324/252       ..Semiconductor type solid-state or
                         magnetoresistive magnetometers

2  324/660       (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/600       IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES
                            REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE
                            RELATIONSHIPS
        324/649       .Lumped type parameters
        324/658       ..Using capacitive type measurement
        324/660       ...With variable electrode area

2  324/714       (2 OR, 0 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/600       IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES
                             REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE
                             RELATIONSHIPS
        324/649       .Lumped type parameters
        324/691       ..Using resistance or conductance measurement

        324/713       ...With voltage or current signal evaluation
        324/714       ....Including a potentiometer

2  324/715       (0 OR, 2 XR)
        Class   324 :  ELECTRICITY:  MEASURING AND TESTING
        324/600       IMPEDANCE, ADMITTANCE OR OTHER QUANTITIES
                             REPRESENTATIVE OF ELECTRICAL STIMULUS/RESPONSE
                             RELATIONSHIPS
        324/649       .Lumped type parameters
        324/691       ..Using resistance or conductance measurement

        324/713       ...With voltage or current signal evaluation
        324/715       ....Including a particular probing technique
                         (e.g., four point probe)

2  338/32R       (1 OR, 1 XR)
        Class   338 :  ELECTRICAL RESISTORS
        338/13        RESISTANCE VALUE RESPONSIVE TO A CONDITION
        338/32R       .Magnetic field or compass (e.g., Hall effect
```

type)

2 340/672 (0 OR, 2 XR)
Class 340 : COMMUNICATIONS: ELECTRICAL
340/500 CONDITION RESPONSIVE INDICATING SYSTEM
340/540 .Specific condition
340/670 ..Velocity
340/671 ...Angular
340/672 ....Direction of shaft rotation

2 340/680 (0 OR, 2 XR)
Class 340 : COMMUNICATIONS: ELECTRICAL
340/500 CONDITION RESPONSIVE INDICATING SYSTEM
340/540 .Specific condition
340/679 ..Machine condition
340/680 ...Machine tool

2 340/870.29 (0 OR, 2 XR)
Class 340 : COMMUNICATIONS: ELECTRICAL
340/870.01 CONTINUOUSLY VARIABLE INDICATING (E.G., TELEMETERING)
340/870.28 .Via radiant energy beam (via particular energy)
340/870.29 ..Photoelectric cell pickup

2 340/870.33 (0 OR, 2 XR)
Class 340 : COMMUNICATIONS: ELECTRICAL
340/870.01 CONTINUOUSLY VARIABLE INDICATING (E.G., TELEMETERING)
340/870.3 .With particular transmitter (e.g., piezoelectric, dynamo)
340/870.31 ..Inductive transmitter
340/870.32 ...Mutual inductance
340/870.33 ....Flux valve type (e.g., with movable saturating magnet)

2 340/870.38 (0 OR, 2 XR)
Class 340 : COMMUNICATIONS: ELECTRICAL
340/870.01 CONTINUOUSLY VARIABLE INDICATING (E.G., TELEMETERING)
340/870.3 .With particular transmitter (e.g., piezoelectric, dynamo)
340/870.38 ..Resistive transmitter

2 341/1 (0 OR, 2 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/1 DIGITAL PATTERN READING TYPE CONVERTER

2 341/116 (0 OR, 2 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/111 PHASE OR TIME OF PHASE CHANGE
341/112 .Synchro or resolver signal
341/116 ..Analog resolver or synchro signal to digital signal

2 341/3 (1 OR, 1 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/1 DIGITAL PATTERN READING TYPE CONVERTER
341/3 .Plural types of codes on single carrier

2 341/35 (1 OR, 1 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/20 BODILY ACTUATED CODE GENERATOR

341/35 .With rotary dial

2 341/7 (0 OR, 2 XR)
Class 341 : CODED DATA GENERATION OR CONVERSION
341/1 DIGITAL PATTERN READING TYPE CONVERTER
341/7 .Antiambiguity feature

2 345/157 (2 OR, 0 XR)
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS
345/156 DISPLAY PERIPHERAL INTERFACE INPUT DEVICE
345/157 .Cursor mark position control device

2 345/168 (0 OR, 2 XR)
Class 345 : COMPUTER GRAPHICS PROCESSING, OPERATOR INTERFACE PROCESSING, AND SELECTIVE VISUAL DISPLAY SYSTEMS
345/156 DISPLAY PERIPHERAL INTERFACE INPUT DEVICE
345/168 .Including keyboard

2 347/104 (2 OR, 0 XR)
Class 347 : INCREMENTAL PRINTING OF SYMBOLIC INFORMATION

347/1 INK JET
347/101 .Medium and processing means
347/104 ..Physical handling

2 356/394 (1 OR, 1 XR)
Class 356 : OPTICS: MEASURING AND TESTING
356/388 BY CONFIGURATION COMPARISON
356/394 .With comparison to master, desired shape, or reference voltage

2 356/398 (0 OR, 2 XR)
Class 356 : OPTICS: MEASURING AND TESTING
356/388 BY CONFIGURATION COMPARISON
356/398 .With object being compared and light beam moved relative to each other (e.g., scanning)

2 356/494 (1 OR, 1 XR)
Class 356 : OPTICS: MEASURING AND TESTING
356/450 BY LIGHT INTERFERENCE (E.G., INTERFEROMETER)
356/491 .Having polarization
356/492 ..For dimensional measurement
356/493 ...Displacement or distance
356/494 ....Having wavefront division (e.g., by diffraction)

2 356/612 (1 OR, 1 XR)
Class 356 : OPTICS: MEASURING AND TESTING
356/601 SHAPE OR SURFACE CONFIGURATION
356/612 .By specular reflection

2 359/814 (0 OR, 2 XR)
Class 359 : OPTICS: SYSTEMS
359/642 LENS
359/811 .With support
359/813 ..Lens movable in its plane
359/814 ...Electromagnetic motive power

2 359/822 (0 OR, 2 XR)
Class 359 : OPTICS: SYSTEMS

```
        359/642       LENS
        359/811       .With support
        359/819       ..Lens mounts
        359/822       ...Adjustable

2  359/824       (1 OR, 1 XR)
        Class   359 :  OPTICS:  SYSTEMS
        359/642       LENS
        359/811       .With support
        359/819       ..Lens mounts
        359/822       ...Adjustable
        359/823       ....With axial adjustment (e.g., adjustable
                         focus, etc.)
        359/824       .....Electromagnetic or piezoelectric drive

2  360/77.03     (0 OR, 2 XR)
        Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                         RETRIEVAL
        360/69        AUTOMATIC CONTROL OF A RECORDER MECHANISM
        360/75        .Controlling the head
        360/77.01     ..Track centering
        360/77.02     ...Rotary carrier
        360/77.03     ....By nonmagnetic sensing (e.g., optical,
                         capacitive)

2  360/78.11     (0 OR, 2 XR)
        Class   360 :  DYNAMIC MAGNETIC INFORMATION STORAGE OR
                         RETRIEVAL
        360/69        AUTOMATIC CONTROL OF A RECORDER MECHANISM
        360/75        .Controlling the head
        360/78.01     ..Track changing
        360/78.04     ...For rotary carrier (e.g., disc)
        360/78.11     ....Including nonmagnetic position sensing

2  369/44.14     (2 OR, 0 XR)
        Class   369 :  DYNAMIC INFORMATION STORAGE OR RETRIEVAL
        369/43        WITH SERVO POSITIONING OF TRANSDUCER ASSEMBLY
                         OVER TRACK COMBINED WITH INFORMATION SIGNAL PROCESSING
        369/44.11     .Optical servo system
        369/44.14     ..Optical head servo system structure

2  399/227       (2 OR, 0 XR)
        Class   399 :  ELECTROPHOTOGRAPHY
        399/130       IMAGE FORMATION
        399/222       .Development
        399/223       ..Plural diverse (e.g., color)
        399/226       ...Plural applicators single position
        399/227       ....Rotary type

2  400/320       (0 OR, 2 XR)
        Class   400 :  TYPEWRITING MACHINES
        400/283       CARRIAGE OR CARRIAGE-MOVING OR
                         MOVEMENT-REGULATING MECHANISM
        400/319       .Carriage-feed mechanism (e.g., escapement,
                         etc.)
        400/320       ..For carriage on which a type-head-carrier is
                         mounted

2  400/322       (1 OR, 1 XR)
        Class   400 :  TYPEWRITING MACHINES
        400/283       CARRIAGE OR CARRIAGE-MOVING OR
                         MOVEMENT-REGULATING MECHANISM
        400/319       .Carriage-feed mechanism (e.g., escapement,
```

```
                    etc.)
      400/322       ..By electric or magnetic power

2  400/323       (1 OR, 1 XR)
      Class   400 :  TYPEWRITING MACHINES
      400/283       CARRIAGE OR CARRIAGE-MOVING OR
                         MOVEMENT-REGULATING MECHANISM
      400/319       .Carriage-feed mechanism (e.g., escapement,
                       etc.)
      400/323       ..Carriage-feed in two directions (e.g.,
                       continuous typing in both directions)

2  400/705.1     (0 OR, 2 XR)
      Class   400 :  TYPEWRITING MACHINES
      400/679       MEANS AUXILIARY TO TYPEWRITING FUNCTION
      400/703       .Indicator means
      400/705       ..For indicating position of carriage along
                       print-line
      400/705.1     ...Of carriage for type-head-carrier

2  400/708       (0 OR, 2 XR)
      Class   400 :  TYPEWRITING MACHINES
      400/679       MEANS AUXILIARY TO TYPEWRITING FUNCTION
      400/703       .Indicator means
      400/706       ..For indicating position of line or
                       end-of-page
      400/708       ...Including detector of record-medium

2  414/730       (1 OR, 1 XR)
      Class   414 :  MATERIAL OR ARTICLE HANDLING
      414/680       VERTICALLY SWINGING LOAD SUPPORT
      414/729       .Grab
      414/730       ..Programmable or condition responsive means
                       controls grab operation

2  417/17        (1 OR, 1 XR)
      Class   417 :  PUMPS
      417/1         CONDITION RESPONSIVE CONTROL OF PUMP DRIVE
                       MOTOR
      417/17        .With plural separate drive motor controlling
                       elements

2  417/42        (0 OR, 2 XR)
      Class   417 :  PUMPS
      417/1         CONDITION RESPONSIVE CONTROL OF PUMP DRIVE
                       MOTOR
      417/42        .In response to pump speed

2  417/423.4     (0 OR, 2 XR)
      Class   417 :  PUMPS
      417/321       MOTOR DRIVEN
      417/410.1     .Electric or magnetic motor
      417/423.1     ..Rotary motor and rotary nonexpansible chamber
                       pump
      417/423.4     ...Turbomolecular pump

2  417/44.1      (2 OR, 0 XR)
      Class   417 :  PUMPS
      417/1         CONDITION RESPONSIVE CONTROL OF PUMP DRIVE
                       MOTOR
      417/44.1      .By control of electric or magnetic drive motor
```

```
2  417/474       (0 OR, 2 XR)
        Class   417 :  PUMPS
        417/437       EXPANSIBLE CHAMBER TYPE
        417/474       .Elongated flexible chamber wall progressively
                        deformed

2  451/5         (1 OR, 1 XR)
        Class   451 :  ABRADING
        451/1         PRECISION DEVICE OR PROCESS - OR WITH CONDITION
                        RESPONSIVE CONTROL
        451/5         .Computer controlled

2  464/185       (0 OR, 2 XR)
        Class   464 :  ROTARY SHAFTS, GUDGEONS, HOUSINGS, AND
                        FLEXIBLE COUPLINGS FOR ROTARY SHAFTS
        464/185       MISCELLANEOUS

2  600/429       (0 OR, 2 XR)
        Class   600 :  SURGERY
        600/300       DIAGNOSTIC TESTING
        600/407       .Detecting nuclear, electromagnetic, or
                        ultrasonic radiation
        600/425       ..With tomographic imaging obtained from
                        electromagnetic wave
        600/429       ...With stereotactic device

2  600/562       (0 OR, 2 XR)
        Class   600 :  SURGERY
        600/300       DIAGNOSTIC TESTING
        600/562       .Sampling nonliquid body material (e.g., bone,
                        muscle tissue, epithelial cells, etc.)

2  604/67        (1 OR, 1 XR)
        Class   604 :  SURGERY
        604/19        MEANS FOR INTRODUCING OR REMOVING MATERIAL FROM
                        BODY FOR THERAPEUTIC PURPOSES (E.G., MEDICATING,
                        IRRIGATING, ASPIRATING, ETC.)
        604/48        .Treating material introduced into or removed
                        from body orifice, or inserted or removed
subcutaneously
                        other than by diffusing through skin
        604/65        ..Material flow varying means controlled by
                        condition responsive sensor
        604/67        ...Sensor controls pump, motor, or pressure
                        driven means

2  606/130       (2 OR, 0 XR)
        Class   606 :  SURGERY
        606/1         INSTRUMENTS
        606/130       .Stereotaxic device

2  702/151       (1 OR, 1 XR)
        Class   702 :  DATA PROCESSING: MEASURING, CALIBRATING, OR
                        TESTING
        702/127       MEASUREMENT SYSTEM
        702/150       .Orientation or position
        702/151       ..Angular position

2  720/659       (2 OR, 0 XR)
        720/658       DYNAMIC MECHANISM OPTICAL SUBSYSTEM
        720/659       .Having power driven optical transducer
                        assembly
        Could not find class title.
```

```
2  720/683       (1 OR, 1 XR)
       720/658       DYNAMIC MECHANISM OPTICAL SUBSYSTEM
       720/672       .Transducer carriage or actuator
       720/681       ..Adjustable objective lens support
       720/682       ...Linear leaf springs
       720/683       ....Coil or magnet
       Could not find class title.

2  901/46        (0 OR, 2 XR)
       Class   901 :  ROBOTS
       901/46        SENSING DEVICE
```

plus search

(4914389
4990909
4841246
4857816
5309830
5978613
6542088
6828783
4897926
4493997
4496835
4825070
4906846
5021648
5189355
5233355
5343393
5456581
5678105
5684647
6060720
6246050
6372065
4569625
4796251
5825307
5949629
4297034
4298285
4812699
4869347
4914371
4931727
5191320
5289749
5408275
5522139
5813900
5873307
5959610
6057829
6093928
6108838
6116139
6142598
6266712
5329216
4463628
4814681
4913158).pn.
(5465624
5598201
6070106
6084400
4255861
4274053
4319188
4392030
4490674
4528682
4535730
4549260
4557661

4558513
4572951
4601241
4767925
4770053
4773426
4774463
4868475
4869257
4872244
4876527
4880011
4887415
4903539
4909623
4928093
4961118
4980839
5061092
5205163
5233920
5239892
5266796
5271290
5310125
5329121
5341722
5348448
5357860
5393201
5419094
5434634
5446711
5449900
5456147
5479929
5483058).pn.
(5494307
5509314
5554894
5555776
5571965
5584198
5608394
5612600
5613675
5652002
5655190
5682026
5725449
5726649
5765493
5830219
5862110
5876784
5933934
5940357
5946127
5951398
6072296
6071477
6078440
6078550

6089359
6100601
6107723
6124709
6130425
6164921
6173480
6179419
6185169
6198788
6205100
6225730
6225730
6258007
6278673
6288994
6310849
6327236
6337837
6345025
6371732
6385142
6396016
6411578).pn.
(6418274
6421615
6425870
6426924
6443960
6445660
6452732
6452877
6483105
6501713
6501720
6535830
6577985
6704257
6733457
6810590
6813459
6857981
6866635
5438172
5778810
5705778
6104845
4285595
5488392
5627531
5859425
6124710
5691647
5841290
5886310
6000694
6175091
3618076
4011448
4024446
4068384
4110829
4276776

4283679
4283836
4294121
4305674
4335694
4338517
4339700
4343114
4346334
4360889
4375592).pn.
(4403193
4408172
4423406
4423970
4442532
4461015
4473786
4475034
4476457
4522517
4524313
4525657
4535277
4543793
4556792
4559524
4563625
4580084
4580871
4584472
4587419
4593269
4600088
4604575
4604521
4605853
4607666
4612503
4619395
4621256
4623831
4757196
4765434
4768119
4769600
4775787
4780610
4780703
4781103
4787259
4788422
4788497
4792739
4792788
4795901
4795925
4796005
4801830
4803354
4803409).pn.
(4806751
4806837

4820087
4829342
4831470
4843314
4843387
4843388
4849680
4864295
4866219
4867064
4868385
4870270
4879552
4882479
4887500
4888986
4894533
4899048
4904915
4905107
4906838
4913072
4914474
4919650
4920341
4928009
4930882
4932311
4932346
4932389
4933673
4939756
4942295
4945231
4945816
4951300
4952080
4951549
4953808
4959574
4963732
4964321
4967072
4968145
4972080
4975570
4977539
4978846).pn.

plus search

10671909_CLS1.txt
Most Frequently Occurring Classifications of Patents Returned
From A Search of 10671909 on August 03, 2005

Original Classifications

17	250/231.13
10	250/231.16
8	250/231.14
6	369/44.27
5	341/15
4	250/231.18
4	341/11
4	600/459
3	101/248
3	200/11R
3	340/870.37
3	341/13
3	360/75
3	600/446
2	82/12
2	310/348
2	310/68B
2	318/561
2	318/602
2	318/632
2	318/685
2	324/207.18
2	324/207.2
2	324/207.25
2	324/714
2	341/6
2	345/156
2	345/157
2	347/104
2	369/44.14
2	369/53.29
2	369/53.37
2	377/24
2	399/227
2	417/44.1
2	606/130
2	720/659

Cross-Reference Classifications

20	250/237G
15	341/13
10	250/231.18
7	250/231.13
7	250/231.14
7	250/231.16
7	324/207.25
7	369/53.37
5	324/207.21
5	341/15
5	341/9
5	369/44.27
4	200/11G
4	250/231.17
4	318/602
4	318/640
4	341/2
4	341/6
3	73/633

3 200/18
3 250/229
3 250/231.15
3 250/551
3 318/603
3 318/630
3 318/632
3 318/85
3 324/174
3 341/10
3 341/11
3 369/53.3
3 377/17
3 377/45
3 720/660
3 901/23
2 33/203.12
2 33/707
2 82/18
2 82/19
2 91/459
2 101/219
2 112/220
2 310/268
2 310/323.03
2 318/283
2 318/615
2 318/616
2 318/618
2 324/160
2 324/162
2 324/175
2 324/252
2 324/660
2 324/715
2 327/4
2 340/672
2 340/680
2 340/870.29
2 340/870.33
2 340/870.38
2 341/1
2 341/116
2 341/7
2 345/168
2 345/184
2 356/398
2 359/814
2 359/822
2 360/77.03
2 360/78.11
2 369/53.29
2 400/320
2 400/705.1
2 400/708
2 417/42
2 417/423.4
2 417/474
2 464/185
2 600/429
2 600/562
2 901/46

Combined Classifications

24	250/231.13
21	250/237G
18	341/13
17	250/231.16
15	250/231.14
14	250/231.18
11	369/44.27
10	341/15
9	324/207.25
9	369/53.37
7	341/11
6	318/602
6	324/207.21
6	341/6
5	318/632
5	341/9
4	101/248
4	200/11G
4	200/11R
4	250/229
4	250/231.17
4	318/603
4	318/640
4	324/174
4	340/870.37
4	341/2
4	369/53.29
4	369/53.3
4	377/17
4	377/45
4	600/459
4	720/660
3	33/203.12
3	73/633
3	200/18
3	250/231.15
3	250/551
3	310/68B
3	318/630
3	318/85
3	324/175
3	324/207.2
3	327/4
3	341/10
3	345/156
3	345/184
3	360/75
3	377/24
3	600/446
3	901/23
2	29/40
2	33/1PT
2	33/203.14
2	33/707
2	74/471XY
2	74/813L
2	82/12
2	82/18
2	82/19
2	91/361
2	91/459
2	101/219

2 112/220
2 125/13.01
2 200/4
2 200/564
2 235/375
2 250/231.1
2 250/559.29
2 271/270
2 310/268
2 310/323.03
2 310/348
2 318/283
2 318/561
2 318/568.22
2 318/615
2 318/616
2 318/618
2 318/653
2 318/654
2 318/660
2 318/661
2 318/685
2 324/160
2 324/162
2 324/165
2 324/173
2 324/207.13
2 324/207.18
2 324/252
2 324/660
2 324/714
2 324/715
2 338/32R
2 340/672
2 340/680
2 340/870.29
2 340/870.33
2 340/870.38
2 341/1
2 341/116
2 341/3
2 341/35
2 341/7
2 345/157
2 345/168
2 347/104
2 356/394
2 356/398
2 356/494
2 356/612
2 359/814
2 359/822
2 359/824
2 360/77.03
2 360/78.11
2 369/44.14
2 399/227
2 400/320
2 400/322
2 400/323
2 400/705.1
2 400/708
2 414/730

2 417/17
2 417/42
2 417/423.4
2 417/44.1
2 417/474
2 451/5
2 464/185
2 600/429
2 600/562
2 604/67
2 606/130
2 702/151
2 720/659
2 720/683
2 901/46